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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,679	12/06/2000	Nabil Khalifa	PHF 99, 618	8828
24737	7590	09/01/2005	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			WILSON, ROBERT W	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/730,679	<b>Applicant(s)</b> KHALIFA ET AL.	
	<b>Examiner</b> Robert W. Wilson	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 & 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejzak (U.S. Patent No.; 6,389,066) in view of Rouse (U.S. Patent No.; 4,561,089)

Referring to claim 1, Ejzak teaches: A transmission system which has a base station or station of the first type per Fig 2. The applicant broadly claims “different station types”. The mobile station has 46 per Figure 2 or transmit timing controller and 44 per Fig 2 or receiving part which adapts the rate or provides synchronization of signals received from other base stations or different station types. 46 per Fig 2 which is the transmit timing controller inherently provides timing in order to adjust the transmission rate.

Ejzak does not expressly call for: transmit timing fixed with respect to the receive by the system clock or sync circuit which adjusts by chip fractions in order to receive signals in the receiving part but teaches receiving part that adapts the rate per Fig 2.

Rouse teaches: transmit timing fixed with respect to receive by the system clock per col. 7 lines 43-67. The reference also teaches a receiver which has a sync circuit 100 per Fig 1 which has an input 102 per Fig 1. The receiving part adjusts to fractions of a chip per col. 9 lines 44-57 or per col. 23 line 6—col. 24 line 44 or per Figs 20a, 20b, 21, 22a, 22b , & 23. Also the reference teaches adjusting the heterodyne frequency to shift the signal to baseband per col. 7 lines 26-62 or modifies the frequency.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add synchronization by adjusting via chip fractions of Rouse to the mobile of Ejzak in order to perform rate adaptation.

Referring to claim 2, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 1, as well as a station of the first type where the receiving part comprising a synchronizing circuit for determining the receiving timing of a plurality of stations of the second type

The combination of Ejzak and Rouse does not expressly call for: synchronizing circuits of the station of the first type compatible to all station of the second type

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Rouse teaches: a synchronizing circuits per Figs 11 & 21

It would have been obvious to one of ordinary skill in the art at the time of the invention that the sync circuits are compatible in order for the receivers to receive the signals which are transmitted or for the invention to work.

Referring to claim 3, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 1

The combination of Ejzak and Rouse does not expressly call for: evaluate and modify the frequency shift.

Rouse teaches: a synchronizing circuits which evaluate and modify the frequency per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention that the sync circuits evaluate and modify the frequency shift in order for the signals which have been transmitted to be received or for the invention to work.

Referring to claim 6, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 1

The combination of Ejzak and Rouse does not expressly call for: sync provides first output satisfactory sync.

The applicant broadly claims "first output satisfactory sync" Rouse teaches: a synchronizing circuits provide first sync output which is satisfactory in order to receive signals per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention that the sync circuits provide first output satisfactory in order for the receiver to receive a signal which have been transmitted to be received or for the invention to work.

Referring to claim 7, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 6

The combination of Ejzak and Rouse does not expressly call for: synchronization circuit provides chip fractions shifted in time produces an already produced chip fraction output that contains chip fraction previously produced at the first output.

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Rouse teaches: a synchronizing circuits provide first sync output in which iterative processing occurs or contains chip fraction previously produced at the first output per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention that the iterative processing utilizes chip fractions previously produced in order to determine the first output.

Referring to claim 8, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 7

The combination of Ejzak and Rouse does not expressly call for: synchronization circuit provides chip fractions shifted in time produces an recently produced chip fraction output that contains chip fraction previously produced at the first output.

Rouse teaches: a synchronizing circuits provide first sync output in which iterative processing occurs or contains chip fraction recently produced at the first output per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention that the iterative processing utilizes chip fractions recently produced in order to determine the first output.

Referring to claim 9, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 8

The combination of Ejzak and Rouse does not expressly call for: synchronization circuit that performs analysis for frequency drift..

Rouse teaches: synchronization circuit that performs analysis for frequency drift per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the sync circuit of Rouse to the system of the combination of Ejzak and Rouse in order to build a system which receives signals which have drifted in frequency.

Referring to claim 10, the combination of Ejzak and Rouse teaches: A transmission system as claimed in claim 9

The combination of Ejzak and Rouse does not expressly call for: modify clock frequency in response to drift.

Rouse teaches: synchronization circuit that modifies clock frequency in response to drift. per Figs 11 & 21 and per col. 7 lines 25-62

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It would have been obvious to one of ordinary skill in the art at the time of the invention to add the sync circuit of Rouse to the system of the combination of Ejzak and Rouse in order to build a system which receives signals which have drifted in frequency.

Referring to claim 4, Ejzak teaches: A transmission system which has a base station or station of the first type per Fig 2. The applicant broadly claims "different station types". The mobile station has 46 per Figure 2 or transmit timing controller and 44 per Fig 2 or receiving part which adapts the rate or provides synchronization of signals received from other base stations or different station types. 46 per Fig 2 which is the transmit timing controller inherently provides timing in order to adjust the transmission rate.

Ejzak does not expressly call for: sync circuit which adjusts by chip fractions in order to receive signals in the receiving part but teaches receiving part that adapts the rate per Fig 2.

Rouse teaches: a receiver which has a sync circuit 100 per Fig 1 which has an input 102 per Fig 1. The receiving part adjusts to fractions of a chip per col. 9 lines 44-57 or per col. 23 line 6—col. 24 line 44 or per Figs 20a, 20b, 21, 22a, 22b, & 23. Also the reference teaches adjusting the heterodyne frequency to shift the signal to baseband per col. 7 lines 26-62 or modifies the frequency.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add synchronization by adjusting via chip fractions of Rouse to the mobile of Ejzak in order to perform rate adaptation.

Referring to claim 11, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 4

The combination of Ejzak and Rouse does not expressly call for: sync provides first output satisfactory sync.

The applicant broadly claims "first output satisfactory sync" Rouse teaches: a synchronizing circuits provide first sync output which is satisfactory in order to receive signals per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention that the sync circuits provide first output satisfactory in order for the receiver to receive a signal which have been transmitted to be received or for the invention to work.

Referring to claim 12, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 11

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The combination of Ejzak and Rouse does not expressly call for: synchronization circuit provides chip fractions shifted in time produces an already produced chip fraction output that contains chip fraction previously produced at the first output.

Rouse teaches: a synchronizing circuits provide first sync output in which iterative processing occurs or contains chip fraction previously produced at the first output per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention that the iterative processing utilizes chip fractions previously produced in order to determine the first output.

Referring to claim 13, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 12

The combination of Ejzak and Rouse does not expressly call for: synchronization circuit provides chip fractions shifted in time produces an already produced chip fraction output that contains chip fraction previously produced at the first output.

Rouse teaches: a synchronizing circuits provide first sync output in which iterative processing occurs or contains chip fraction recently produced at the first output per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention that the iterative processing utilizes chip fractions recently produced in order to determine the first output.

Referring to claim 14, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 13

The combination of Ejzak and Rouse does not expressly call for: synchronization circuit that performs analysis for frequency drift..

Rouse teaches: synchronization circuit that performs analysis for frequency drift per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the sync circuit of Rouse to the system of the combination of Ejzak and Rouse in order to build a system which receives signals which have drifted in frequency.

Referring to claim 15, the combination of Ejzak and Rouse teach: A transmission system as claimed in claim 14

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The combination of Ejzak and Rouse does not expressly call for: modify clock frequency in response to drift.

Rouse teaches: synchronization circuit that modifies clock frequency in response to drift. per Figs 11 & 21 and per col. 7 lines 25-62

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the sync circuit of Rouse to the system of the combination of Ejzak and Rouse in order to build a system which receives signals which have drifted in frequency.

### ***Claim Rejections - 35 USC § 112***

3. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to claims 1, 4, & 5; the disclosure fails to define a "different station types". Is a "different station type" a third type of station or is it a different "type 1 station " or different "type 2 station"?

Referring to claim 2, where in the disclosure is compatible defined. Does the applicant really mean interoperable.

### ***Claim Objections***

4. Claims 2 & 5-20 are objected to because of the following informalities:

Referring to claim 2, the examiner objects to the usage of the word compatible for sync circuit. The examiner believes that the applicant really means interoperable. Appropriate correction is required.

Referring to claims 1, 4, & 5; the examiner objects to the usage of the "different station types" because it is confusing. It is not clear whether a "different station type" is a third type of station or is it a different "type 1 station " or different "type 2 station"?

Referring to claim 5, the examiner objects to the limitations of "measuring the receive clock derivation" followed by "adjusting the transmit clock at the station of the second type by adopting the opposite deviation value" because these claim limitations are confusing and vague



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because “derivation” and “deviation” are confusing and vague. The examiner believes that the invention is “measuring the receive clock deviation” and is “adjusting the transmit clock by adopting the opposite of said deviation value”. Appropriate correction is required.

Referring to claims 10 & 15, the examiner objects to ‘modifying the clock frequencies in response to the frequency drift’ because a clock does not have frequencies. The examiner suggests” modifying or means for modifying the clock in response to the frequency drift”.

### ***Drawings***

5. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the applicant submitted handwritten drawings in response to a previous objection by the examiner. These drawing were submitted 3/20/05. The examiner suggests that the applicant formalize these drawing in order to be of sufficient quality in be in a published patent. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant’s use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase “Not Applicable” should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

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- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The examiner objects to the specification because it is not in the format as shown above. The examiner suggests that the applicant submit a substitute specification including the outstanding specification amendments as well as putting the specification in the above format in order for it to be of the quality to be published as a patent.

#### ***Response to Amendment***

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075.

The examiner can normally be reached on M-F (8:00-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571/272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571/273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert W Wilson  
Examiner  
Art Unit 2661

RWW  
8/22/05



**BOB PHUNKULH**  
**PRIMARY EXAMINER**